ENVIRONMENTAL PUBLIC HEALTH AND EMERGENCY RESPONSE



Prepared by:
Bryant J Wilke, R.S.
Director of Environmental Health Services
Environmental Health Services Division
Saginaw County Department of Public Health

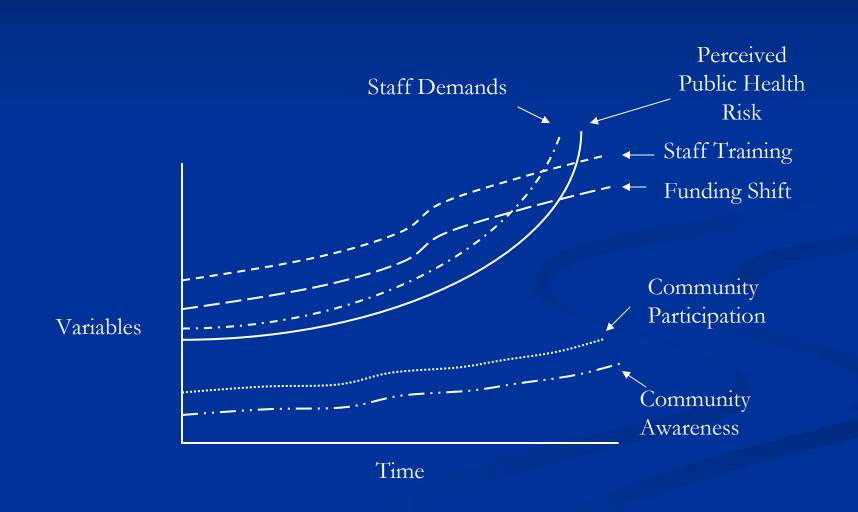




INTRODUCTION

Building a competent workforce for environmental public health is necessary for all local health departments. Integrated training that reflects all hazard plans must include knowledge of incident command and first responder-critical/crisis thinking to enhance environmental public health practice. These additional training requirements compete with program demands that are oftentimes unfunded. A well-trained environmental health workforce that administers emergency response procedures and provides services according to health department emergency response plans is necessary to fulfill the public health mission. Skills developed in daily environmental public health activities are the same as those required in an emergency response. Developing training to accompany the all hazards plan is necessary to build a competent workforce, to improve staff confidence and to minimize health threats during a public health emergency.

ENVIRONMENTAL PUBLIC HEALTH AND EMERGENCY RESPONSE BEHAVIOR OVER TIME GRAPH



LIMITS TO SUCCESS

National Emergency Preparedness/Requirements

Pressure to Meet
Short-Term
B
Requirements

Readiness and Availability

Ability to Adjust to Concerning Operations

R

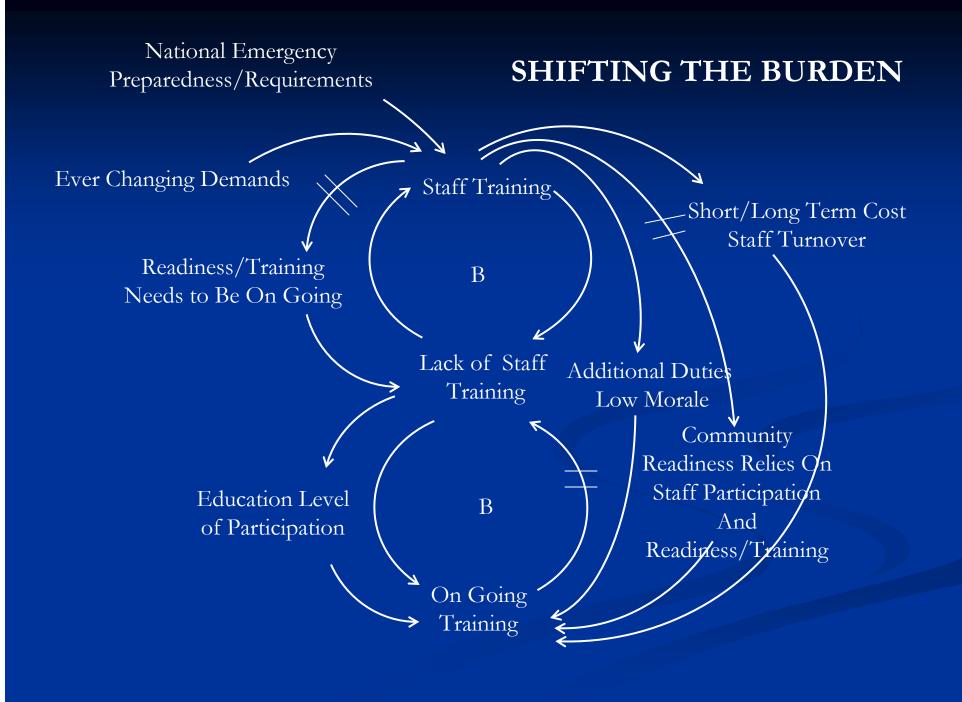
Completing the written all hazards plan is fairly straight forward but executing it may be difficult.

Collaboration Building

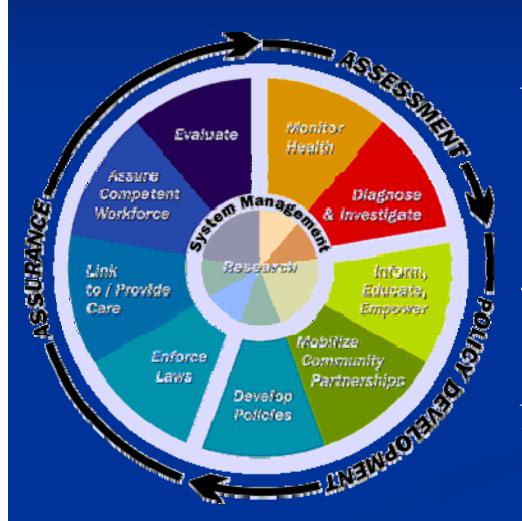
Cycle Time

Diversion of Staff and Resources from Normal Duties To Unplanned/Untrained Situations

Ever Changing
Demands



THE TEN ESSENTIAL ENVIRONMENTAL PUBLIC HEALTH SERVICES



"The potential consequences of an inadequately staffed and trained workforce are worrisome. Few national resources are committed to preparing future environmental public health and protection professionals; training opportunities for members of the existing workforce are limited: and opportunities for local workers to upgrade their environmental public health knowledge are not readily available. Thus, the number of graduates from accredited programs in environmental public health and training opportunities for current environmental public health professionals, particularly at the local level, both need to be increased." (CDC, September 2003)

TEN ESSENTIAL ENVIRONMENTAL PUBLIC HEALTH SERVICES

Essential Services

Project Activities

1. Monitor	Track complaints and illness reports through Epi Team.
2. Diagnose	Conduct environmental assessments on all relative complaints.
3. Inform, educate and empower	Provide on-site trainings for community emergency response as well as individual home emergency awareness for employees families well being.
4. Mobilize community partnerships	Collaborate, make presentations to community groups.
5. Develop policies and plans	Develop internal policies and plans addressing staff training, certification requirements as well as continue education.
6. Enforce laws and regulations	Reinforce laws and regulations covering emergency issues.
7. Link people	Seek partnerships with municipalities and local leaders.
8. Assure a competent workforce	 Provide in-service trainings and financial support for off-site trainings.
9. Evaluate	 Survey customers yearly. Survey collaborative partners on yearly basis. Survey staff with an internal survey on yearly basis.
10. Research	Research national EH emergency management trends.

ENVIRONMENTAL PUBLIC HEALTH EMERGENCY PREPAREDNESS LOGIC MODEL

Resources/inputs

Activities

Outputs

Funding/Partners

- •CDC/EPA
- •State
- •Local
- Foundations
- Staff
- Faculty
- •Advisory Committees

Partners

- •Lead Individuals
- •Executive Managers
- •Law Enforcement
- •Fire Department
- •LEPC Staff

Program Design and Development

- •Set calendar of events
- •Establish training for current health department employees
- •Establish health department emergency response plans in compliance with federal mandates and establish staff roles in implementing plans.
- •Level of community response as a whole Collaborative information
- •Partner participation level assessment
- •Training curriculum
- •Event calendar and participants

Training

- •Conduct EH staff pre-training assessments
- •Conduct onsite training sessions
- •NIMS 100, 200, 700, 800
- •Respirator training (fit testing)
- •Conduct off-site training if needed HAZWOPER (40 hr training)
- Public health staff training
- •Expand training to include other public health employees associated with emergency response activities, Epi-Team, Executive Staff

- •# individual assessments
- •# persons trained
- •diversity of persons trained
- •#, scope, and focus of trainings
- •# off site based trainings
- •# evaluations/facilitator interest
- •Determine involvement in collaborative projects
- •Determine number of training events implemented
- •Project receives feedback on collaboration efforts

Teamwork and Collaborative Projects

- •Develop potential partner list
- •Contact partners with collaboration
- •Department present concepts to partners
- •Conduct table top exercises involving community members

Continued on next slide



ENVIRONMENTAL PUBLIC HEALTH EMERGENCY PREPAREDNESS LOGIC MODEL

Short & Long Term Outcomes, Impacts

Learning

- •Increased capacity of Public Health response capabilities
- •Improved delivery emergency services
- •Increased community knowledge
- •Increased collaboration between partners/other agencies
- •Improved integration of public health into collaborations
- •Emergency response capabilities increased

Learning

- Public health employees increase knowledge and confidence
- •Department becomes confident and self reliant

Learning

- •Increased partnerships between PH leaders and community
- •Increase in projects addressing needs of unprepared communities and/or populations

Behavior

- •Increased leadership knowledge and capacity of public health leaders
- •Behavior changes in community
- Accepted response activities

Results

- •More efficient and effective public health system
- •Limiting health issues during an emergency incident.

GOALS AND OBJECTIVES

Program Goal:

To create a confident, well-trained, and highly skilled Public Health Emergency Response Team integrated from all disciplines within the health department's staff that is capable of responding to both natural and technological/man-made emergencies and disasters.

Health Problem:

Inadequate public health emergency preparedness and response may increase the risk of disease and injury to vulnerable communities and populations during emergencies and disasters.

Outcome Objective

To improve the health department's capabilities during an emergency response activity through education, training, emergency drills and exercises.

CONTRIBUTING FACTORS

- Lack of specific emergency response education and training for local public health employees.
- Department-wide support to integrate emergency preparedness into daily operations.
- Lack of public awareness on the importance of being individually prepared for emergencies and disasters.
- Increased overhead cost due to training requirements.

PROCESS OBJECTIVES

- Create an epidemiological team (Epi-Team) from multiple disciplines within the health department by March 1, 2007.
- Conduct a tabletop exercise on April 10, 2007 that includes similar elements proposed in the full scale MBS Airport exercise scheduled for May 23, 2007.
- Include Health Department participation on the exercise design team for the MBS Airport full scale drill scheduled for May 23, 2007. Include a pandemic flu scenario to exercise a Point of Distribution (POD) for mass prophylaxis.
- Conduct joint exercise with the main Saginaw Post Office mini dispensing site drill September 19, 2007.
- Public Health Response Team to host an in county-wide 800 megahertz radio exercise, October 1, 2007.
- Conduct Incident Command System training for all health department employees utilizing FEMA programs, NIMS 100, 200, 700 and 800 core courses by September 1, 2007.
- Train and certify all health department staff on proper respirator protection (fit testing) by June 1, 2007.
- Create an illness monitoring procedure so that community illness and incidents are reviewed weekly by the Community Disease Nurse and Lead Environmental Health Specialist surveillance.

NEXT STEPS

INTERNAL STEPS:

- Epi-Team meets monthly for surveillance activities.
- Provide the initial respirator training and fit testing by June 1, 2007 and continue every year thereafter.
- Continue training sessions for all new employees.
- Continue annual training sessions for existing employees.
- Conduct internal survey by October 1, 2007 to assess staff levels of familiarity and confidence in emergency response activities.
- Complete funding analysis and seek additional training funds if necessary by September 30, 2007.

EXTERNAL STEPS:

- Participate in local, state and federal emergency exercises and drills.
- Host community awareness events.

REFERENCES

Centers for Disease Control. A National Strategy to Revitalize Environmental Public Health Services. Atlanta, GA: Department of Health and Human Services. Centers for Disease Control: September 2003.

ACKNOWLEDGEMENTS

I would like thank the following individuals for providing me with the opportunity to attend the second class of the Environmental Public Health Leadership Institute and affording me their support and guidance throughout the wonderful learning and professional development process.

Brian Hubbard, MPH, Environmental Health Scientist, CDC, (Mentor) and Nicole Kozma, Program Coordinator, EPHLI.

A very special thank to Natasha Coulouris, Health Officer, Saginaw County Department of Public Health and to all of the Environmental Health staff for their support and encouragement throughout the past year.